

Claims

- [c1] A reprographic marking device that marks a substrate, comprising:
- a first roll;
 - a second roll in press contact with the first roll to form a nip portion to more than substrate; and
 - a drive motor for moving at least one of the first roll and the second roll in a continuous back and forth lateral motion to change a position of the at least one of the first roll and the second roll relative to the substrate passing through the nip portion.
- [c2] The device as in claim 1, further comprising at least one sensor to detect a position predetermined travel of the at least one of the first roll and the second roll.
- [c3] The device as in claim 2, further comprising a flag assembly for triggering the at least one sensor, wherein the flag assembly moves concurrently with the at least one of the first roll and the second roll.
- [c4] The device as in claim 3, wherein the drive motor reverses a direction of travel of the at least one of the first roll and the second roll when the at least one sensor de-

tests the position of predetermined travel the at least one first roll and the second roll.

[c5] The device as in claim 3, wherein the flag assembly triggers the at least one sensor when the at least one first roll and the second roll is in the position predetermined travel.

[c6] The device as in claim 1, wherein the first roll and the second roll are housed in an openable roll drawer disposed in the printing device.

[c7] The device as in claim 6, wherein the drive motor drives the roll drawer in a continuous back and forth lateral motion to change a position of the first roll and the second roll relative to a substrate passing through the nip portion.

[c8] The device as in claim 6, wherein the roll drawer is detachably attached to a flag assembly that moves concurrently with roll drawer.

[c9] The device as in claim 2, wherein the at least one sensor is attached to the printing device.

[c10] The device as in claim 1, wherein the at least one of the first roll and the second roll moves about 34 mm in one direction.

- [c11] The device as in claim 1, wherein at least one of the first roll and the second roll travels laterally about 0.0113 mm per a substrate passing through the nip portion.
- [c12] The device as in claim 1, wherein at least one of the first roll and the second roll travels laterally about 1.133 mm per minute.
- [c13] A method of reducing edge effects in a reprographic fusing device having a conformable surface, comprising:
moving a substrate through a nip formed between a fuser roll and a pressure roll; and
continuously moving at least one of the fuser roll and the pressure roll in a continuous lateral back and forth motion relative to the direction of a substrate passing through the nip.
- [c14] The method of claim 13, wherein the at least one of the fuser roll and the pressure roll is moved about 0.0113 mm per each substrate passing through the nip portion.
- [c15] The method of claim 13, wherein the at least one of the first roll and the second roll travels laterally about 1.133 mm per minute.
- [c16] The method of claim 13, further comprising tensioning the at least one of the fuser roll and the pressure roll to

reduce any backlash effects during the back and forth motion.

- [c17] The method of claim 13, wherein the conformable surface has edge accumulator areas and non-edge accumulation areas further comprising smoothing a transition area between edge accumulation areas and non-edge accumulation areas to reduce differential gloss.
- [c18] The method of claim 13, wherein at least one of the fuser roll and the pressure roll is continuously moved for a variable period of time after the at least one of the fuser roll and the pressure roll has reached a detected position of maximum travel.
- [c19] The method of claim 18, wherein the variable period of time is determined by accessing at least one of a look-up table and a smoothing algorithm.